# **Decision Support Briefing**Southeast River Forecast Center



## **Hydrologic Vulnerability Assessment**



**Issued:** 12:32 PM ET

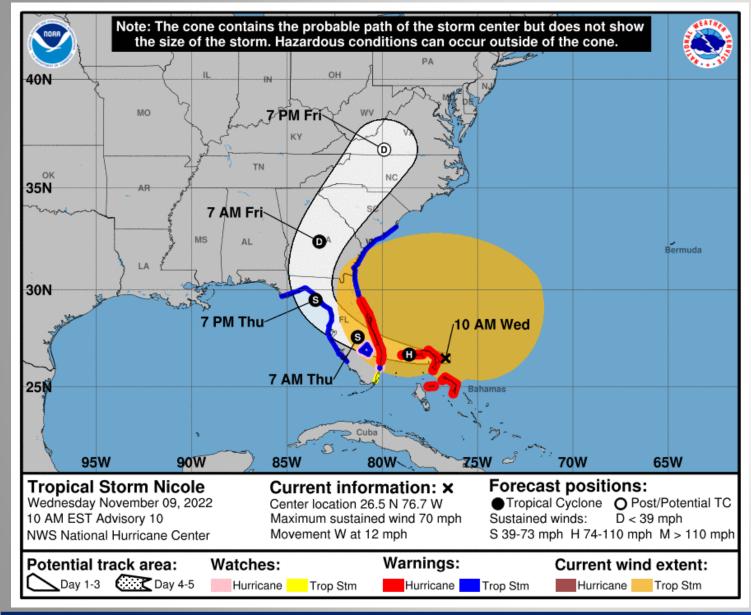
Wednesday, November 9, 2022







- **Tropical Storm Nicole is currently forecast to move across** Florida Thursday, before turning northeast and tracking across the Southeast Friday, weakening as it does so.
- It is expected to bring a widespread, soaking rain to the Southeast. The heaviest rainfall totals will be focused along the Appalachians and in southeast Georgia.
- Overall, bankfull and isolated minor flood stage rises are expected, thanks in part to dry antecedent conditions.



Nicole is currently a large tropical storm as it approaches the Florida coast.

It is expected to further strengthen, and is forecast to be a category 1 hurricane by landfall.

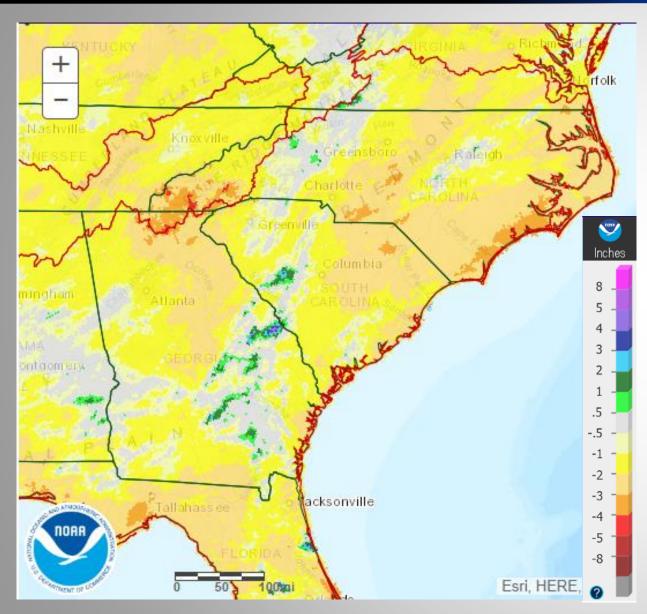
Nicole is then expected to weaken as it moves over Florida Thursday.
Additional weakening will take place as it turns northeast and moves through the Southeast and into the Mid-Atlantic Friday.

Even as it weakens, it is expected to bring the potential for heavy rain across the region.

### 30-Day Departure From Normal Precipitation

Southeast River Forecast Center Issued November 9, 2022 12:32 PM ET

As of November 9, 2022



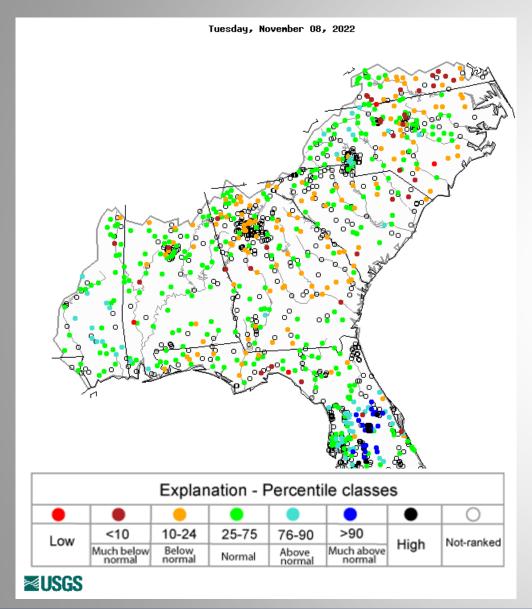
Most locations are working with drier antecedent conditions.

Outside of a few isolated pockets, rainfall amounts aver Georgia and the Carolinas have been near or below normal for the past 30 days.

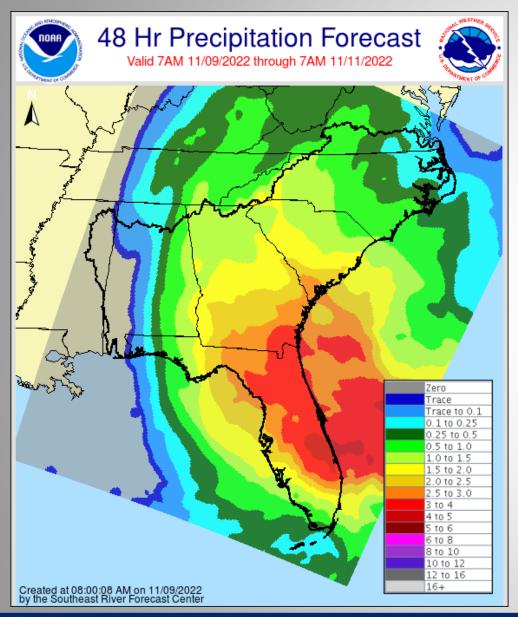
#### 7-Day Average Streamflow Compared to Normal Southeast River Forecast Center

Issued November 9, 2022 12:32 PM ET





7 day average streamflow highlights a similar trend. Many locations across Georgia and the Carolinas are seeing 7 day average streamflows near to below normal.



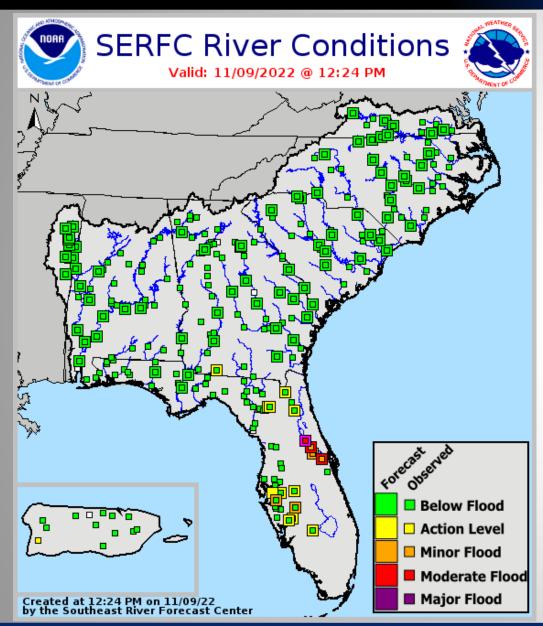
SERFC forecasts include a 48-hour rainfall forecast each time they are issued.

At this time, not all of the expected rainfall from Nicole is being included.

As Nicole moves into the region, forecasts will continue to be updated to reflect the most up to date information.



#### **SERFC River Conditions**



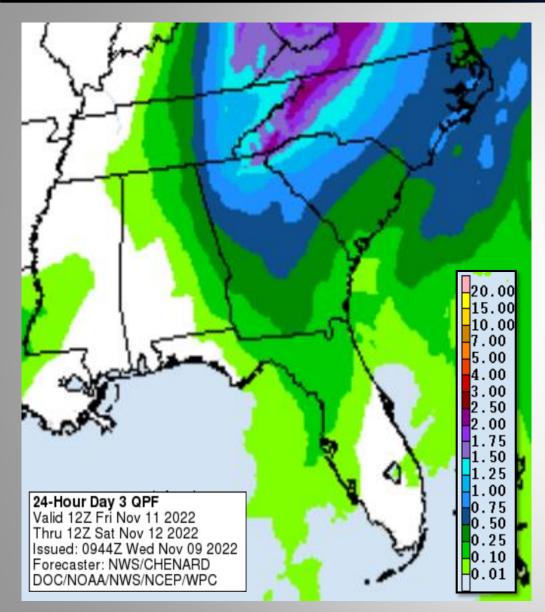
This graphic shows both current river conditions along with the recent forecast.

Currently, bankfull rises are forecast in southern Georgia and northern Florida.

These forecasts only include 48 hours of rainfall, and will continue to be updated as the system continues to progress. For a range of possibilities using more than 48 hours of QPF, refer to the Meteorological Model Ensemble Forecasts.

12z Friday Nov 11 - 12z Saturday Nov 11





This graphic shows additional rainfall forecast on day three.

This combined with days 1-2 gives forecast storm totals ranging roughly from 0.75-1.50" within eastern portions of the Carolinas, with 2-5" expected elsewhere across the southeast. However, the locations seeing the higher amounts of 3-5" are mainly within south and southeast Georgia and along the terrain in the Carolinas. Locally higher amounts are possible.

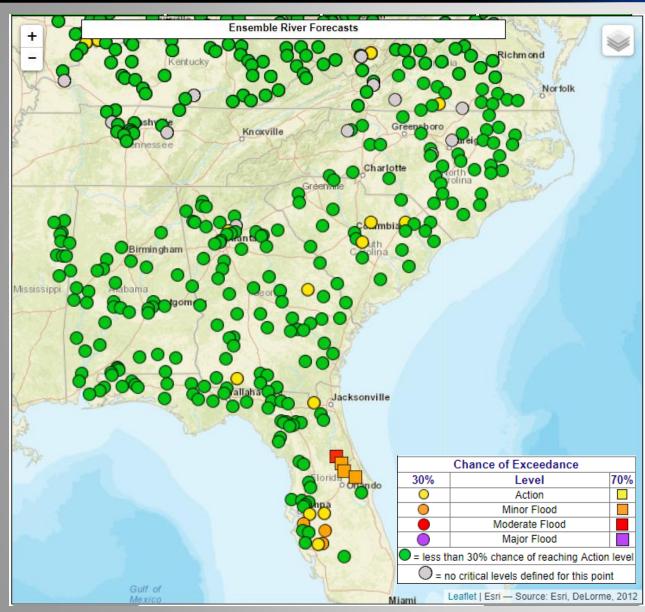
Again, any rain falling beyond 48 hours will not be included in the forecasts at this time. However, it is included in the Meteorological Model Ensemble Forecasts (MMEFs).

#### Meteorological Model Ensemble Forecast

**Southeast River Forecast Center** 

Map as of November 9, 2022 at 10:01 AM EST





The Meteorological Model Ensemble Forecast System (MMEFS), to the left, is using the NAEFS model and addresses uncertainty in the longer lead rainfall forecast that helps to provide a confidence level for potential flooding. The NAEFS runs in our model every 12 hours.

Ensembles mainly point to the potential for a few locations to reach action. From Georgia through the Carolinas. A few instances of locations reaching flood stage cannot be entirely ruled out, but will be isolated in nature.

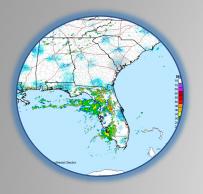
To take a closer look, here is the link to more detailed information:

https://www.weather.gov/erh/mmefs

- SERFC will begin 24-hour operations and will continue until further notice. Please contact us if you have any questions or concerns.
- The Decision Support Briefing will continue until further notice.

Latest River Stages and Forecasts are available...click here!

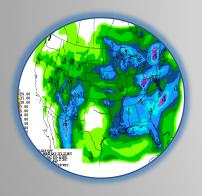
Please send all operational correspondence to <a href="mailto:sr-alr.rivers@noaa.gov">sr-alr.rivers@noaa.gov</a> or call the office directly.



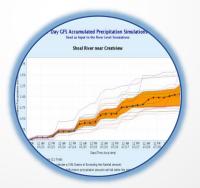
**Latest Radar** 



**SERFC Quick Brief** 



**Latest Forecast Rainfall** 



**MMEFS - Ensemble River Forecasts** 

- This product has set the stage for the upcoming event. The Decision Support Briefing will begin tomorrow to update you on current conditions and changes to the forecast.
- These slides are intended for your use. Please feel free to share these with others. If you have any questions please email <a href="mailto:sr-alr.rivers@noaa.gov">sr-alr.rivers@noaa.gov</a> or contact your local NWS Weather Forecast Office.
- <u>Remember</u>: SERFC briefings cover freshwater flooding. For information on coastal and tidal flooding, flash floods, winds, and severe weather risks, please contact your local Weather Forecast Office.